

## IN THE CLAIMS

Please amend the claims as shown below.

1. (Currently Amended) An emulsion comprising:

water;

hydrophilic particles comprising oxide particles having surfaces covered with polar radicals; and

hydrophobic particles;

wherein the hydrophilic and hydrophobic particles form shells encapsulating a gas that are suspended in the water, said shells comprising an external layer of hydrophilic particles and an internal layer of hydrophobic particles adjacent to the layer of hydrophilic particles.

2. (Currently Amended) An emulsion according to claim 1 wherein hydrophilic particles dispersed in the water ~~and form~~ with the water a gel-like structure having filaments of hydrophilic particles to which water molecules adhere.

3. (Original) An emulsion according to claim 1 wherein the shells have a characteristic diameter in a range from about 1 micrometer to about 20 micrometers.

4. (Original) An emulsion according to claim 1 or wherein a relative concentration by weight of the hydrophobic particles in the emulsion is such that the emulsion does not tend to become a powder.

5. (Original) An emulsion according to claim 2 wherein a concentration by weight of hydrophobic particles in the emulsion is between 0.5% and 1.8%.

6. (Original) An emulsion according to claim 1 wherein the hydrophobic particles have a characteristic specific surface greater than about 100 m<sup>2</sup>/g.

7. (Original) An emulsion according to claim 2 wherein the hydrophobic particles have a characteristic specific surface greater than about 100 m<sup>2</sup>/g.

8. (Original) An emulsion according to claim 1 wherein a relative concentration by weight of the hydrophilic particles in the emulsion is about equal to  $K_{\text{phil}}/S_{\text{phil}}$  where  $S_{\text{phil}}$  is a characteristic specific surface of the hydrophilic particles and  $K_{\text{phil}}$  is a constant having a value between about  $20 \text{ m}^2/\text{g}$  and about  $50 \text{ m}^2/\text{g}$ .

9. (Original) An emulsion according to claim 8 wherein  $K_{\text{phil}}$  has a value between about  $30 \text{ m}^2/\text{g}$  and about  $40 \text{ m}^2/\text{g}$ .

10. (Original) An emulsion according to claim 1 wherein the hydrophilic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

11. (Original) An emulsion according to claim 8 wherein the hydrophilic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

12. (Original) An emulsion according to claim 9 wherein the hydrophilic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

13. (Original) An emulsion according to claim 1 wherein a characteristic diameter of the hydrophilic particles is between about 5 nm and about 150 nm.

14. (Original) An emulsion according to claim 2 wherein a characteristic diameter of the hydrophobic particles is between about 5 nm and about 150 nm.

15. (Canceled)

16. (Original) An emulsion according to claim 15 wherein the hydrophilic particles comprise a mix of hydrophilic particles, said mix comprising a first type of hydrophilic particles formed from particles based on a first oxide and at least one second type of hydrophilic particles formed from particles based on a second oxide different from the first oxide.

17. (Original) An emulsion according to claim 15 wherein the oxide particles are selected from the group consisting of  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{MnO}$  particles.
18. (Original) An emulsion according to claim 16 wherein the oxide particles are selected from the group consisting of  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{MnO}$  particles.
19. (Original) An emulsion according to claim 15 wherein the polar radicals are selected from the group consisting of  $\text{OH}$ ,  $\text{CA}_2\text{CO}_3$ ,  $\text{CUSO}_4$  and  $\text{CASO}_4$ .
20. (Original) An emulsion according to claim 1 wherein the hydrophobic particles comprise oxide particles having surfaces covered with non-polar radicals.
21. (Original) An emulsion according to claim 20 wherein the hydrophobic particles comprise a mix of hydrophobic particles, said mix comprising a first type of hydrophobic particles formed from particles based on a first oxide and at least one second type of hydrophobic particles formed from particles based on a second oxide different from the first oxide.
22. (Original) An emulsion according to claim 20 wherein the oxide particles are selected from the group consisting of  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{MnO}$  particles. .
23. (Original) An emulsion according to claim 1 wherein the gas is air.
24. (Original) An emulsion according to claim 1 wherein the gas is ozone.
25. (Original) An emulsion according to claim 1 wherein a substance beneficial for skin care is present in the water.
26. (Original) An emulsion according to claim 25 wherein the substance is an oil.
27. (Original) An emulsion according to claim 25 wherein the substance is vitamin A.
28. (Original) An emulsion according to claim 25 wherein the substance is beta carotene.

29. - 52. (Canceled)

53. (Original) A method of reducing wrinkling in a region of skin comprising:

forming a layer of an emulsion according to claim 1 on the region; and

waiting a sufficient period of time so that a portion of the water from the emulsion is absorbed by the region and the volume of the layer shrinks so that the layer transforms into a network of strands on the region, which network is anchored to the skin by attraction of hydrophilic and hydrophobic particles to the skin and tends to contract as water is absorbed from the emulsion.

54. (Original) A method according to claim 53 and comprising applying water to the region of skin after the network is formed so that the network absorbs water and expands and subsequently releases water to the skin and contracts again.

55. (Original) A method according to claim 53 and comprising applying a substance comprising a component that is absorbed by the network and the skin to the region of skin after the network is formed so that the network absorbs the component and expands and subsequently releases the component to the skin and contracts again.

56. (Original) A method according to claim 55 wherein the component is an oil.

57. (Original) A method according to claim 55 wherein the component is vitamin A.

58. (Original) A method according to claim 55 wherein the component is beta carotene.

59. - 64. (Canceled)

65. (Original) A method of forming an aqueous emulsion in which encapsulated pockets of gas are suspended in water comprising:

forming a solution of water and hydrophilic particles;

adding a quantity of hydrophobic particles to the solution to form a mixture;

causing the gas to be present in the mixture while causing the gas to cavitate so as to generate pockets of the gas in the mixture and wherein the quantity of hydrophobic particles added to the mixture is not sufficient to cause the cavitating mixture to form a powder.

66. (Canceled)

67. (New) An emulsion comprising:

water;

hydrophilic particles; and

hydrophobic particles comprising oxide particles having surfaces covered with non-polar radicals;

wherein the hydrophilic and hydrophobic particles form shells encapsulating a gas that are suspended in the water, said shells comprising an external layer of hydrophilic particles and an internal layer of hydrophobic particles adjacent to the layer of hydrophilic particles.

68. (New) An emulsion according to claim 67 wherein hydrophilic particles dispersed in the water and form with the water a gel-like structure having filaments of hydrophilic particles to which water molecules adhere.

69. (New) An emulsion according to claim 67 wherein the shells have a characteristic diameter in a range from about 1 micrometer to about 20 micrometers.

70. (New) An emulsion according to claim 67 or wherein a relative concentration by weight of the hydrophobic particles in the emulsion is such that the emulsion does not tend to become a powder.

71. (New) An emulsion according to claim 68 wherein a concentration by weight of hydrophobic particles in the emulsion is between 0.5% and 1.8%.

72. (New) An emulsion according to claim 67 wherein the hydrophobic particles have a characteristic specific surface greater than about 100 m<sup>2</sup>/g.

73. (New) An emulsion according to claim 68 wherein the hydrophobic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

74. (New) An emulsion according to claim 67 wherein a relative concentration by weight of the hydrophilic particles in the emulsion is about equal to  $K_{\text{phil}}/S_{\text{phil}}$  where  $S_{\text{phil}}$  is a characteristic specific surface of the hydrophilic particles and  $K_{\text{phil}}$  is a constant having a value between about  $20 \text{ m}^2/\text{g}$  and about  $50 \text{ m}^2/\text{g}$ .

75. (New) An emulsion according to claim 74 wherein  $K_{\text{phil}}$  has a value between about  $30 \text{ m}^2/\text{g}$  and about  $40 \text{ m}^2/\text{g}$ .

76. (New) An emulsion according to claim 67 wherein the hydrophilic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

77. (New) An emulsion according to claim 74 wherein the hydrophilic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

78. (New) An emulsion according to claim 75 wherein the hydrophilic particles have a characteristic specific surface greater than about  $100 \text{ m}^2/\text{g}$ .

79. (New) An emulsion according to claim 67 wherein a characteristic diameter of the hydrophilic particles is between about 5 nm and about 150 nm.

80. (New) An emulsion according to claim 68 wherein a characteristic diameter of the hydrophobic particles is between about 5 nm and about 150 nm.

81. (New) An emulsion according to claim 67 wherein the hydrophilic particles comprise oxide particles having surfaces covered with polar radicals.

82. (New) An emulsion according to claim 81 wherein the hydrophilic particles comprise a mix of hydrophilic particles, said mix comprising a first type of hydrophilic particles formed from

particles based on a first oxide and at least one second type of hydrophilic particles formed from particles based on a second oxide different from the first oxide.

83. (New) An emulsion according to claim 81 wherein the oxide particles are selected from the group consisting of  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{MnO}$  particles.

84. (New) An emulsion according to claim 67 wherein the oxide particles are selected from the group consisting of  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{MnO}$  particles.

85. (New) An emulsion according to claim 81 wherein the polar radicals are selected from the group consisting of  $\text{OH}$ ,  $\text{Ca}_2\text{CO}_3$ ,  $\text{CuSO}_4$  and  $\text{CaSO}_4$ .

86. (New) An emulsion according to claim 67 wherein the hydrophobic particles comprise a mix of hydrophobic particles, said mix comprising a first type of hydrophobic particles formed from particles based on a first oxide and at least one second type of hydrophobic particles formed from particles based on a second oxide different from the first oxide.

87. (New) An emulsion according to claim 67 wherein the oxide particles are selected from the group consisting of  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{TiO}_2$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{MnO}$  particles. .

88. (New) An emulsion according to claim 67 wherein the gas is air.

89. (New) An emulsion according to claim 67 wherein the gas is ozone.

90. (New) An emulsion according to claim 67 wherein a substance beneficial for skin care is present in the water.

91. (New) An emulsion according to claim 25 wherein the substance is an oil.

92. (New) An emulsion according to claim 25 wherein the substance is vitamin A.

93. (New) An emulsion according to claim 25 wherein the substance is beta carotene.

94. (New) A method of reducing wrinkling in a region of skin comprising:

forming a layer of an emulsion according to claim 67 on the region; and

waiting a sufficient period of time so that a portion of the water from the emulsion is absorbed by the region and the volume of the layer shrinks so that the layer transforms into a network of strands on the region, which network is anchored to the skin by attraction of hydrophilic and hydrophobic particles to the skin and tends to contract as water is absorbed from the emulsion.

95. (New) A method according to claim 94 and comprising applying water to the region of skin after the network is formed so that the network absorbs water and expands and subsequently releases water to the skin and contracts again.

96. (New) A method according to claim 94 and comprising applying a substance comprising a component that is absorbed by the network and the skin to the region of skin after the network is formed so that the network absorbs the component and expands and subsequently releases the component to the skin and contracts again.

97. (New) A method according to claim 96 wherein the component is an oil.

98. (New) A method according to claim 96 wherein the component is vitamin A.

99. (New) A method according to claim 96 wherein the component is beta carotene.

100. (New) An emulsion comprising:

water;

hydrophilic particles; and

hydrophobic particles;

wherein the hydrophilic and hydrophobic particles form shells encapsulating a gas that are suspended in the water, said shells comprising an external layer of hydrophilic particles and an internal layer of hydrophobic particles adjacent to the layer of hydrophilic particles and wherein a relative concentration by weight of the hydrophilic particles in the emulsion is about equal to



$K_{phil}/S_{phil}$  where  $S_{phil}$  is a characteristic specific surface of the hydrophilic particles and  $K_{phil}$  is a constant having a value between about  $20 \text{ m}^2/\text{g}$  and about  $50 \text{ m}^2/\text{g}$ .

101. (New) A method of reducing wrinkling in a region of skin comprising:

forming a layer of an emulsion according to claim 100 on the region; and

waiting a sufficient period of time so that a portion of the water from the emulsion is absorbed by the region and the volume of the layer shrinks so that the layer transforms into a network of strands on the region, which network is anchored to the skin by attraction of hydrophilic and hydrophobic particles to the skin and tends to contract as water is absorbed from the emulsion.

102. (New) A method of reducing wrinkling in a region of skin the method comprising:

a) providing an emulsion comprising:

water;

hydrophilic particles; and

hydrophobic particles;

wherein the hydrophilic and hydrophobic particles form shells encapsulating a gas that are suspended in the water, said shells comprising an external layer of hydrophilic particles and an internal layer of hydrophobic particles adjacent to the layer of hydrophilic particles;

b) forming a layer of the emulsion on the region; and

c) waiting a sufficient period of time so that a portion of the water from the emulsion is absorbed by the region and the volume of the layer shrinks so that the layer transforms into a network of strands on the region, which network is anchored to the skin by attraction of hydrophilic and hydrophobic particles to the skin and tends to contract as water is absorbed from the emulsion.